**UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA**

**Academic Lesson Plan for Summer semester- 2022**

**Name of the teaching faculty: Dharitree Behera Department: Electrical Engineering**

**Semester: 6th Subject: EI&E**

**No. of periods per week: 5 Total Periods: 60**

**End semester exam: 80 Class test: 20**

**Total Marks: 100**

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| Sl. No. | Week | Period | Unit/Chapter | Topic to be covered |
| **1.** | **1st** | **1st** | INDIAN ELECTRICITY RULES | Introduction to EIE. Definition of different electricity term. |
| **2.** | **2nd** | INDIAN ELECTRICITY RULES | Introduction to EIE. Definition of different electricity term. |
| **3.** | **3rd** | INDIAN ELECTRICITY RULES | Different rules of General safety precautions |
| **4.** | **4th** | INDIAN ELECTRICITY RULES | Different rules of General conditions relating to supply and use of energy |
| **5.** | **5TH** | INDIAN ELECTRICITY RULES | Different rules of General conditions relating to supply and use of energy |
| **6** | **2nd** | **1st** | INDIAN ELECTRICITY RULES | Different rules of General conditions relating to supply and use of energy |
| **7.** | **2nd** | INDIAN ELECTRICITY RULES | Different rules of OH lines |
| **8.** | **3rd** | TUTORIAL CUM DOUBT CLEAR CALSS | Objective questions related to Indian electricity rules |
| **9.** | **4th** | ELECTRICAL INSTALLATIONS | Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. |
| **10.** | **5TH** | ELECTRICAL INSTALLATIONS | Methods of wiring |
| **11.** | **3rd** | **1st** | ELECTRICAL INSTALLATIONS | Methods of wiring |
| **12.** | **2nd** | ELECTRICAL INSTALLATIONS | Types of cables used in internal wiring |
| **13.** | **3rd** | ELECTRICAL INSTALLATIONS | ACCESSORIES |
| **14.** | **4th** | ELECTRICAL INSTALLATIONS | ACCESSORIES |
| **15.** | **5TH** |  | ACCESSORIES |
| **16** | **4th** | **1st** | ELECTRICAL INSTALLATIONS | Determination of size of earth wire and earth plate for domestic and industrial installations |
| **17.** | **2nd** | ELECTRICAL INSTALLATIONS | LIGHTING SCHEME |
| **18.** | **3rd** | ELECTRICAL INSTALLATIONS | Types of lighting schemes |
| **19.** | 4TH | ELECTRICAL INSTALLATIONS | General rules for wiring |
| **20.** | 5TH | ELECTRICAL INSTALLATIONS | General rules for wiring |
| **21.** | **5th** | **1st** | ELECTRICAL INSTALLATIONS | determination of number of points |
| **22.** | **2nd** | ELECTRICAL INSTALLATIONS | Doubt clear class related to Electrical installations |
| **23.** | **3rd** | TUTORIAL CUM DOUBT CLEAR CALSS | Objective questions related to electrical installation |
| **24.** | **4th** | INTERNAL WIRING | Type of internal wiring |
| **25.** | **5th** | INTERNAL WIRING | Do |
| **26.** | **6th** | **1st** | INTERNAL WIRING | Do |
| **27.** | **2nd** | INTERNAL WIRING | Prepare one estimate of materials required for CTS wiring |
| **28.** | **3rd** | INTERNAL WIRING | Do |
| **29.** | **4th** | INTERNAL WIRING | Prepare one estimate of materials required for conduit wiring |
| **30.** |  | **5th** | INTERNAL WIRING | Do |
| **31.** | **7th** | **1st** | INTERNAL WIRING | Do |
| **32.** | **2nd** | INTERNAL WIRING | Prepare one estimate of materials required for concealed wiring |
| **33.** | **3rd** | INTERNAL WIRING | Do |
| **34.** | **4th** | INTERNAL WIRING | Prepare one estimate of materials required for erection of conduct wiring |
| **35.** | **5th** | INTERNAL WIRING | Do |
| **36.** | **8th** | **1st** | INTERNAL WIRING | Do |
| **37.** | **2nd** | TUTORIAL CUM DOUBT CLEAR CALSS | Objective questions related to Internal wiring |
| **38.** | **3rd** | OVER HEAD INSTALLATION | Main components of overhead lines |
| **39.** | **4th** | OVER HEAD INSTALLATION | Types of insulators |
| **40.** | **5th** | OVER HEAD INSTALLATION | Do |
| **41.** | **9th** | **1st** | OVER HEAD INSTALLATION | Lighting arresters, danger plates, |
| **42.** | **2nd** | OVER HEAD INSTALLATION | Prepare an estimate of materials required for LT distribution line |
| **43.** | **3rd** | OVER HEAD INSTALLATION | Calculation of the size of conductor |
| **44.** | **4th** | OVER HEAD INSTALLATION | Prepare an estimate of materials required for LT distribution line |
| **45.** | **5th** | OVER HEAD INSTALLATION | Do |
| **46.** | **10th** | **1st** | OVER HEAD INSTALLATION | Do |
| **47.** | **2nd** | OVER HEAD INSTALLATION | Do |
| **48.** | **3rd** | OVER HEAD INSTALLATION | Prepare an estimate of materials required for HT distribution line |
| **49** | **4th** | OVER HEAD INSTALLATION | Do |
| **50.** | **5th** | OVER HEAD INSTALLATION | Do |
| **51.** | **11th** | **1st** | OVER HEAD INSTALLATION | Do |
| **52.** | **2nd** | TUTORIAL CUM DOUBT CLEAR CALSS | Objective questions related to overhead installations |
| **53.** | **3rd** | OVER HEAD SERVICE LINES | Components of service lines |
| **54.** | **4th** | OVER HEAD SERVICE LINES | Service line (cables and conductors) |
| **55.** | **5th** | OVER HEAD SERVICE LINES | DO |
| **56.** | **12th** | **1st** | OVER HEAD SERVICE LINES | Ariel fuse, service support, energy box and meters |
| **57.** | **2nd** | OVER HEAD SERVICE LINES | Prepare and estimate for providing single phase supply |
| **58.** | **3rd** | OVER HEAD SERVICE LINES | Do |
| **59.** | **4th** | OVER HEAD SERVICE LINES | Prepare and estimate for providing single phase supply load of 3KW |
| **60.** | **5th** | OVER HEAD SERVICE LINES | Do |
| **61.** | **13th** | **1st** | OVER HEAD SERVICE LINES | Do |
| **62.** | **2nd** | OVER HEAD SERVICE LINES | Prepare one estimate of materials required for service connection using insulated wire |
| **63.** | **3rd** | OVER HEAD SERVICE LINES | Do |
| **64.** | **4th** | OVER HEAD SERVICE LINES | Prepare one estimate of materials required for service connection using bare conductor |
| **65.** | **5th** | OVER HEAD SERVICE LINES | Do |
| **66.** | **14th** | **1st** | OVER HEAD SERVICE LINES | Do |
| **67.** | **2nd** | TUTORIAL CUM DOUBT CLEAR CALSS | Objective questions related to overhead service line |
| **68.** | **3rd** | ESTIMATING FOR DISTRIBUTION SUBSTATIONS | Prepare materials estimate for Pole mounted substation |
| **69.** | **4th** | ESTIMATING FOR DISTRIBUTION SUBSTATIONS | Do |
| **70.** | **5th** | ESTIMATING FOR DISTRIBUTION SUBSTATIONS | Do |
| **71.** | **15th** | **1st** | ESTIMATING FOR DISTRIBUTION SUBSTATIONS | Prepare materials estimate for plinth mounted substation |
| **72.** | **2nd** | ESTIMATING FOR DISTRIBUTION SUBSTATIONS | Do |
| **73.** | **3rd** | TUTORIAL CUM DOUBT CLEAR CALSS | All topics |
| **74.** | **4th** | TUTORIAL CUM DOUBT CLEAR CALSS | All topics |
| **75.** | **5th** | TUTORIAL CUM DOUBT CLEAR CALSS | All topics |

**The lesson plan prepared by the concerned faculty Dharitree Behera**

**PTGF, ELECTRICAL DEPARTMENT**